

# The Revised Total Coliform Rule

NHWWA Operators Training Session  
December 3, 2008  
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***"If we get it right,*** the new [Total Coliform Rule] will be simpler, less confusing for our customers, and more proactive."

- Carrie Lewis  
Milwaukee Water Works  
AWWA Rep. for TCR Advisory Comm.

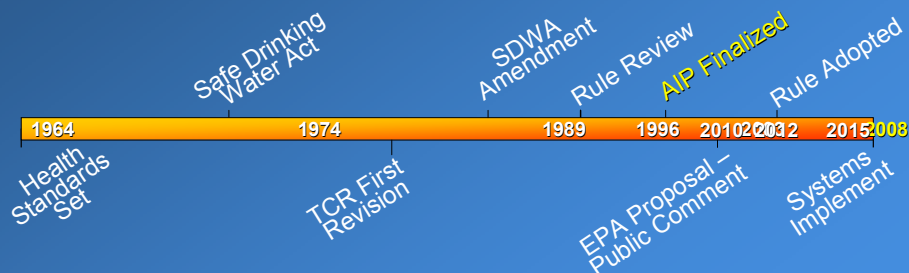
## Presentation Goals

- Background of TCR – Timeline
- Review Proposed Construct of Revisions
- Other Related Topics: Overlap with Groundwater Rule, More Info on Bacteria, Historic Data for NH, Distribution System Issues
- Your Questions



## Timeline

On September 18, 2008, members of the Total Coliform Rule/Distribution System Advisory Committee (TCRDSAC) signed an **Agreement in Principle (AIP)** that recommends revisions to the 1989 Total Coliform Rule (TCR) ...



## The Total Coliform Rule

- About the Current Rule:
  - Requires all public water systems to monitor for the presence of total coliforms in the distribution system.
  - Total coliforms are used to determine the adequacy of water treatment and the integrity of the distribution system.
  - Covers: Sampling frequency, issuance of violations, public notice requirements.



## The Total Coliform Rule

- Applicable State Rules:
  - [Env-Ws 310-316 Drinking Water Quality Standards](#)
  - [Env-Ws 320-339 Monitoring, Reporting, Compliance - Lab Methods](#)
  - [Env-Ws 351-359 Public Notification by Public Water Systems](#)



# Frequency of Sampling for Community Water Systems

Population Served Minimum number of samples per month



<b>25 to 1,000</b>	<b>1</b>
1,001 to 2,500	2
2,501 to 3,300	3
3,301 to 4,100	4
4,101 to 4,900	5
4,901 to 5,800	6
5,801 to 6,700	7
6,701 to 7,600	8
7,601 to 8,500	9
8,501 to 12,900	10
12,901 to 17,200	15
17,201 to 21,500	20
21,501 to 25,000	25
25,001 to 33,000	30
33,001 to 41,000	40
41,001 to 50,000	50
50,001 to 59,000	60
59,001 to 70,000	70
70,001 to 83,000	80
83,001 to 96,000	90
96,001 to 130,000	100
130,001 to 220,000	120

Table 325-1

**The city of Manchester takes 120 samples per month.**



## DES - Database



## Violations

- **Maximum Contaminant Level:**
  - For a system which collects 40 or more samples per month: no more than 5.0 percent of the samples
  - For a system which collect less than 40 samples per month: no more than one sample collected
- **Monitoring and Reporting:**
  - Major Violation
  - Minor Violation
- **Public Notice:** Standard and Acute notices, type of system determines delivery



## Key Points

- Communication, know who to talk to.
- Make sure of your sampling procedures.
- Know which sampling forms to use.
- Know how to carry out public notification.
- Take extra measures to protect your customers.



## Proposed Revisions

- Overall Shift in Focus
  - From monitoring results leading to public notification
  - To monitoring results leading to investigation and corrective action
- Benefits:
  - More proactive approach to public health protection
  - Less confusion associated with PN actions for TC violations

Source: AWWA Webcast Program: TCR Proposed Revisions & Potential Impacts



## Proposed Revision

- Monitoring Frequency
  - No monitoring changes for systems collecting > 5 samples per month (serving > 4,100 people)
  - Changes in monitoring requirements for small systems
    - Routine sampling still based on pop.
    - Repeats (from 4 to 3) *\*Source sample must be taken for GWS to comply with Groundwater Rule*
    - Additional routines (if quarterly from 5 to 3)
    - Flexibility in sample siting plans

Source: AWWA Webcast Program: TCR Proposed Revisions & Potential Impacts



## Proposed Revisions

- Reduced monitoring
  - Criteria will be more stringent:
  - Annual Sanitary Surveys or level 2 assessment
  - Clean sampling history (12 months)
  - Cross connection program
  - Meet disinfection criteria (if applicable)
  - Have a licensed operator (for non-community)

Source: AWWA Webcast Program: TCR Proposed Revisions & Potential Impacts



## Proposed Revisions

- Violations
  - Use TC as part of an overall Treatment Technique (TT)
    - No MCLG/MCL for Total Coliform (Major change)
    - TC threshold exceedence triggers assessment and corrective action (of any deficiency found)
    - TT violation if assessment or corrective action is not completed (requiring public notice)
  - Retains MCLG=0 for E.coli and current MCL associated with presence of TC/E.coli – no longer use Fecal Coliforms.

Source: AWWA Webcast Program: TCR Proposed Revisions & Potential Impacts



## Proposed Revisions

- Purpose of Assessments
  - Proactively enhance public health
    - Identify sanitary deficiencies
    - Identify incorrect monitoring practices
    - Level 1 done by PWS
    - Level 2 done by approved operator/consultant
  - Reviewed by DES to:
    - Establish that the problem has been corrected
    - Determine if the likely cause has been identified

Source: AWWA Webcast Program: TCR Proposed Revisions & Potential Impacts



## Proposed Revisions

### Questions from Assessments

1. Have any of the following occurred at relevant facilities prior to the collection of TC samples?
2. Have there been any recent changes?
3. Evaluate sample site
4. Sample protocol followed
5. Distribution system
6. Storage tank
7. Treatment process (if applicable)
8. Source – Well
9. Source – Spring

Source: AWWA Webcast Program: TCR Proposed Revisions & Potential Impacts





## Proposed Revisions

- Public Notice
  - E. Coli. – (same as current rule)
  - Treatment Technique Violation
  - Monitoring Violation (missed sample)
  - Reporting Violation (missed assess)

Source: AWWA Webcast Program: TCR Proposed Revisions & Potential Impacts



## Resources

- On-line:
  - DES: [www.des.nh.gov/organization/divisions/water/dwgb/index.htm](http://www.des.nh.gov/organization/divisions/water/dwgb/index.htm)
  - EPA: [www.epa.gov/ogwdw000/disinfection/tcr/regulation\\_revisions.html](http://www.epa.gov/ogwdw000/disinfection/tcr/regulation_revisions.html)
  - CDC: [www.cdc.gov/ecoli/](http://www.cdc.gov/ecoli/)
- Granite State Rural Water: (603) 753-4055
- Contact me:

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